DOCUMENT RESUME

ED 406 568 CE 073 841

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TITLE	Effectiveness of On-the-Job Training.
PUB DATE	Mar 97
NOTE	17p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, March 24-28, 1997).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adult Education; Distributive Education; Foreign Countries; *Instructional Innovation; *On the Job Training; Persuasive Discourse; *Program Effectiveness; Program Evaluation; Sales Occupations; *Sales Workers; *Salesmanship; Success; *Telecommunications
IDENTIFIERS	*Netherlands; Telemarketing

ABSTRACT

A study carried out in the largest telecommunication organization in the Netherlands focused on-the-job training (OJT) as an effective training method. It also studied which variables explained OJT effectiveness and whether improvement of OJT effectiveness was possible through modification of training design. The objective was to improve trainee telemarketers' sales communication with customers. A pretest/posttest design was used. The first posttest was immediately after training, the second approximately 15 weeks later. To study the effects of modification of training, two groups were formed: a treatment group of four regional call centers and a comparison group of three centers (total number of trainees was 60). For the treatment group, four training activities were added to the OJT: self-study assignments, observational checklists of other trainees' behavior, logs for trainees to formulate behavioral goals and evaluate their progress, and short meetings with managers to discuss progress in job behavior. Findings indicated a modest but significant progress in trainees' behavior following OJT. With regard to trainee characteristics, age, behavior, and perception of the training before the OJT predicted trainee progress. Two organizational factors that were predictors for progress were managerial support and workload during training. The length of OJT was a strong predictor for progress. A number of trainees in the treatment group did not participate in the additional activities. (Appendixes include 29 references and 2 tables.) (YLB)

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ED 406 568

Effectiveness of on-the-job training

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1. Introduction

Since previous decennium increasing attention is paid to on-the-job training (OJT). Various motives are accountable for this growing attention. It is assumed that OJT reduces the transfer problem. In OJT tasks and job characteristics during and after the training are identical and therefore it is expected transfer will take place. Rothwell (1991) explains the current interest for training on-the-job in the US by the downsizing of corporate training budgets. Due to the necessity to invest training dollars as effective as possible organizations tend to use OJT often in stead of more expensive off-the-job training programs. The use of training on-the-job could also be linked with the current thoughts about the organization as a learning entity (Jacobs, 1992). Training on-the-job fits reasonably well in the idea that managers should be more responsible for training opportunities in their department. Also OJT is in line with the philosophy of the learning organization because of the direct link between learning and working.

2. Theoretical background

Research into OJT can be divided into three streams of inquiry. Below follows a brief description of these streams.

Research in the domain of OJT. The first stream deals with the relationship between organizational features and OJT (Glaudé, 1994; Glaudé, 1996; Onstenk, 1994). This type of research gains a lot of attention, especially in the Netherlands. The general assumption is that a relationship does exist between the training design of OJT and the type of organizations as categorized by Mintzberg (1983). So far, no exclusive relationships between types of organizations and characteristics of OJT are reported.

A second stream of inquiry highlights the design, implementation and deliverance of OJT (Black et al, 1996; De Jong, 1993; Rothwell & Kazanas, 1990; Semb et al, 1995; Sullivan & Micklas, 1985, Yang & McLean, 1996). These studies highlight the variety of design features and stress the need for professional trainers and the commitment of management as an important conditions for a successful use of OJT.

In the third stream of inquiry the investigation of the financial benefits of OJT is the central issue (Jacobs & McGiffin, 1987; Jacobs et al, 1992; Jacobs & Hruby, 1996). In two of the three case-studies of Jacobs financial benefits of OJT exceeded the financial costs for the design and delivery of the OJT.

The conclusion that may be drawn from available research studies is that the body of knowledge

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concerning on-the-job training is of a rather descriptive nature, with the exception of the projects in the third stream. However, the projects of Jacobs and his co-authors provide no profound insight in the variables that predict the effectiveness of OJT.

Effectiveness of training. Effectiveness is a concept that consists of four levels: satisfaction, learning results, job behavior and organizational benefits (Kirckpatrick, 1975). The effectiveness of corporate training is not only caused by training characteristics but is also influenced by trainee's characteristics and organizational characteristics. With regard to trainee characteristics evidence exists for the impact of age (Kubeck et al., 1996; Hastings et al., 1995), the influence of work experience (Thijssen, 1996; Quinones, Ford & Teachout, 1995), level of education (Gielen, 1995), self-efficacy (Gielen, 1995; Gist et al., 1991; Hastings et al., 1995; Mathieu et al., 1993; Tannenbaum et al., 1991), perceived relevance of the training (Ameel, 1992; Baldwin & Magjuka, 1991) and job involvement (Brown & Leigh, 1996; Gauthier, 1995; Gielen, 1995). The influence of the supervisor (and sometimes the influence of colleagues) on the effectiveness of corporate training was evident in the work of Brinkerhoff & Montesino, 1995; Gielen, 1995; Gielen & van der Klink, 1995; Rouiller & Goldstein, 1993 and Xiao, 1996.

3. Company and content of the training

The study reported here was carried out in the largest telecommunication organization in The Netherlands, PTT Telecom. In this study the focus was on the regional call-centers staffed by telemarketeers. Their job is to communicate by telephone with customers about all the services PTT Telecom offers. Last years a shift was noticeable in the company's strategy. It is not only the task of telemarketeers to provide information but it is also their duty to sell products and services to the customers. Therefore, frequently attention is paid to employees' sales behavior. One of the instruments managers can use to enhance sales behavior is the OJT offered by the HRD department of PTT Telecom. The OJT can be characterised as a short individual refreshment training. This means a trainer visits the call-center for several days and listens to the communication between the employee and the customer. For this purpose the trainer has an additional phone he can plug which enables him to have direct access to the communication between the employee and the customer. During and between calls the trainer provides feedback to the trainee with regard to his behavior. The length of the OJT varies and depends on trainee's progress but is seldom longer than one day.

4. Research questions and design of the study

In this study the focus was on three research questions:

1) is OJT an effective training method?

2) which variables explain the effectiveness of OJT?

3) is improvement of the effectiveness of OJT possible through modification of the training design?

Effectiveness was operationalized as job behavior and organizational benefits. To be able to answer these three research questions a pre-test post-test design was found most adequate. To determine the impact of OJT two measurements after the training were scheduled. The first post-test was immediate after the training (O2), the second approximately 15 weeks later (O3). These two measurements were preceded by a pre-test (O1) at the start of the OJT.

Respondents were the trainees (O1,O2 and O3) their trainers (O1, O2) and trainees' managers (O3). In this paper focus is only on the data from the trainee's questionnaires. To answer the third research question, two groups were formed. The treatment group consisted of four regional call-centers and three other centers formed the comparison group.

5. Content of the training activities for the treatment group

To the usual OJT four training activities were added. Below a short description follows. Self-study assignments were developed that were partly based on the principles of the "Leittext-method". These assignments contained questions and remarks regarding all the phases off the sales conversation. Goal of these assignments was to stimulate trainees to reflect on their own behavior. To stimulate trainees to evaluate their behavior on the telephone, observational checklists were developed. Trainees were asked to observe each others behavior and to provide their partner with feedback. Also a log was constructed that provided trainees the possibilities to formulate their own behavioral goals and to evaluate their progress. These three activities were stored in a brochure that contained also a short introduction. In the introduction trainees were asked to work on the additional training activities during the hours that customers' calls were scarce. Trainers presented these brochures to the trainees and asked them to work on these activities. Trainees' managers were requested to meet with their trainees during the time interval of the OJT deliverance in the call-center. Managers were asked to discuss during short 10-minutes meeting the trainee's progress in job behavior individually. Subjects and examples of questions applied in these discussion were included in the request. Managers received this request from the trainer, together with a copy of the trainee's folder.

6. Instruments

Trainee characteristics and organizational characteristics. For the measurement of trainee characteristics and organizational characteristics as much as possible existing scales were used. For example, for the measurement of job involvement the 6-item scale of Lodahl & Keiner (1965) was used.

Characteristics of the OJT. Two variables were chosen to measure features of the OJT. The

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trainees' perception of the quality of the deliverance of the OJT was measured with a 9-item scale. Also the length of the training was measured (in minutes).

Effectiveness of OJT: job behavior and perception. After consultation of the trainers and existing training documents and sales literature the measurement of job behavior was found to be most adequate by the use of four variables: sales behavior, handling customers' complaints, general conversation behavior and the perception of the calls with sales potential.

For sales behavior a scale was developed that consisted of 25 items. This scale focused on: opening the conversation, analyzing customers' needs and desires, offering a product or service, dealing with objections of customers, and finishing the sales conversation. A scale of 5 items was used to measure the trainee's behavior regarding handling customer's complaints. This scale focused on the aspects that are typically for communication with complaining customers (example of item: I express verbally understanding for the customer's problem). Also a scale of 8 items was constructed to measure general conversation behavior (example of item: I use the customer's family name to create a pleasant atmosphere). It was assumed that trainer's feedback would change trainee's perception of the calls with sales potential. Perception of the amount of potential sales conversations of all calls trainees have with customers was measured with a single item. A complete overview of all the variables included in the study is displayed in Appendix 1.

Effectiveness of OJT: organizational benefits. To measure organizational benefits it was found most appropriate to use the data that is available in the management information system of every regional call-center. However, during the project this data was not available due to the fact that the use of this information for organizational purposes was at the heart of a debate between the company's management and the company's employee council.

7. Respondents

Seven regional call-centers were involved in this study. At one call-center the OJT was stopped in a very early stage of the project. From this call-center only two trainees filled in a O1 questionnaire. In another call-center the training had already started. Only O2 and O3 questionnaires were received from this center. In total, data of 60 trainees were collected. However, a majority of the trainees did not return all three questionnaires, despite several attempts to receive all the mailed questionnaires. Below in Table 1 respondents per time interval are listed.

Table 1 Number of trainees at O1, O2 and O3

	O1	O2	O3
number of trainees	49	39	26

8.1. Effectiveness of the OJT

Reliabilities of the scales. From all variables included in this study, means and standard deviations are presented in Appendix 1. Also the reliabilities and the number of items for every scale are included in the same appendix. Almost all reliabilities were above .70. In general, a consistency measure of .70 or higher is considered appropriate. For several scales the reliability varied between .60 and .70. This was considered acceptable.

Deliverance of the OJT. The average length of the training was almost five hours (285 minutes). The quality of the deliverance of the OJT was perceived as high (mean: 3.94 on a 5-point scale).

Improvement of job behavior. To determine whether the OJT had impacted the trainee's behavior a comparison of job behavior scores before (O1) and immediately after the training (O2) was carried out. In the perception of trainees the progress in their behavior was rather modest.

Table 2 *Behavioral progress and perception of calls*

	Before OJT (O1)	After OJT (O2)	Progress in behavior and perception	t-test value	df	p
sales behavior[1] (n=25)	5.03	5.30	.27	3.88	24	.00
handling complains[1] (n=25)	5.68	5.93	.25	2.60	24	.01
general conversation[1] (n=25)	5.62	5.88	.26	2.30	24	.02
% potential sales calls[2] (n=24)	25.08	27.71	2.63%	n.s.		

[1] items were phrased from 1= very poor performance to 7= very good performance.
[2] rated on a scale of 0% to 100%

Table 2 shows the limited progress in behavior was significant. Remarkable was the variety in scores. For example, for the sales behavior the average progress was .27 and the standard deviation was .35, indicating that for some trainees the OJT resulted in a decline in their sales behavior. Only a minor change in perception took place. After the OJT the trainees perceived a slightly higher percentage of potential sales calls, but this was not a statistical significant change in perception.

Long-term transfer: Further investigation took place of the long-term effect of the OJT. For this purpose a comparison between the trainee's O2 and O3 behavioral scores was carried out. In Table 3 the results of this comparison are displayed. The assumption was that if long-term transfer occurred, the mean scores of the behavioral scales at O2 and O3 were equal, or the mean at O3 was higher. This assumption was confirmed by the data (see Table 3). The scores at O2 and O3 were almost equal and no significant difference was observed. OJT thus resulted in a positive long-term transfer of the learned behavior to the trainee's job.

Table 3 *Long-term transfer*

	After OJT (O2)	15 weeks after completion of OJT (O3)	Mean (difference)	t-test
sales behavior[1] (n=21)	5.37	5.42	.05	n.s.
handling complains behavior[1] (n=21)	5.90	5.87	-.03	n.s.
general conversation behavior[1] (n=21)	5.80	5.82	.02	n.s.

[1] items were phrased from 1= very poor performance to 7= very good performance.

8.2. Variables that influenced the effectiveness of the OJT

To answer the second research question proficient, regression analyses were performed. For this purpose the mean differences of O2 minus O1 were used as dependent variables. They reflected trainees progress between O1 and O2. The variables predicting the progress in sales behavior were: the support of the manager, trainee's self-efficacy and trainee's sales behavior before the OJT (see Table 4). Based on the results of Table 4 it was concluded that management support had a positive influence on the progress in sales skills, while trainee's self-efficacy and sales behavior at the start of the OJT both had a negative influence on the progress in sales behavior. The progress in handling customers' complaints was also investigated. The results of the multiple regression procedure are displayed in Table 5. As this Table shows, the single predictor for the progress in handling customers' complaints was the length of the OJT. For the progress in general conversation the length of the OJT was also the only predictor (see Table 6).

Table 4: *Multiple regression analysis for progress in sales behavior*

Independent variables	Mult.r	r^2	p(F)	Beta	*t*	p(t)
support manager	.58	.33	.01	.68	5.74	.00
self-efficacy (O1)	.78	.60	.00	-.59	-4.94	.00
sales behavior before OJT (O1)	.90	.81	.00	-.46	-3.86	.00

Table 5: *Multiple regression analysis for progress in handling complaints*

Independent variables	Mult.r	r^2	p(F)	Beta	*t*	p(t)
length of OJT	.57	.32	.01	-.57	-2.84	.01

Table 6: *Multiple regression analysis for progress in general conversation*

Independent variables	Mult.r	r^2	p(F)	Beta	*t*	p(t)
length of OJT	.58	.33	.01	.58	2.90	.01

Table 7: *Multiple regression analysis for progress in % of potential sales calls*

Independent variables	Mult.r	r^2	p(F)	Beta	*t*	p(t)
age	.63	.40	.00	.38	2.68	.02
workload during OJT	.78	.61	.00	.47	3.54	.00
trainee's perception potential sales calls before OJT	.88	.77	.00	-.43	-3.13	.00

Predicting variables for the progress in trainee's perception of potential sales calls were: age, workload during training and trainee's perception of potential sales calls at the start of the OJT. As Table 7 shows, these three variables explained 77% of the variance in the progress scores. Surprisingly, workload has not a negative effect on the progress. Probably, the more calls trainees have during OJT, the more opportunities trainers have to point at the possibilities in these calls for selling products to customers. Trainee's perception of potential sales calls at the start of OJT had a negative impact on the progress during the OJT.

Predicting the long-term transfer. To determine the long-term transfer of the OJT, multiple regression was carried out. For this purpose the mean differences between O2 and O3 were used as dependent variables. These scores reflect trainees long-term maintenance of job behavior.

The only predictor for the long-term transfer of sales behavior was the trainee's sales behavior after the completion of the OJT (see Table 8). Sales behavior at O2 explained 24% of the variance of the mean difference. Apparently, trainees who judged their sales behavior higher at O2 had the smallest relapse in their sales behavior. For general conversation only one variable predicted the long-term transfer (see Table 9). Trainee's perception of relevance of the OJT, after the completion of the training, explained 31% of the variance in the scores. For the long-term transfer of handling complaints no predicting variables were found.

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Table 8: *Multiple regression analysis for long-term transfer of sales behavior*

Independent variables	Mult.r	r^2	p(F)	Beta	t	p(t)
sales behavior after completion of the OJT (O2)	.49	.24	.03	.49	2.42	.03

Table 9: *Multiple regression analysis for long-term transfer of general conversation*

Independent variables	Mult.r	r^2	p(F)	Beta	t	p(t)
perception of relevance OJT (O2)	.55	.31	.04	.55	2.31	.04

8.3. Effects of the treatment

Table 10 presents an overview of the number of trainees that were involved in the training activities of the treatment locations. A short description of the training activities that were part of the treatment is presented in section 5 of this paper.

As Table 10 shows only a minority of the trainees performed the training activities that were part of the treatment. In the O2-questionnaire trainees were asked to give reasons for not carrying out these activities. The most frequently mentioned reason was lack of time. However, the scores for workload in the O1 and O2 trainee's questionnaires indicated that the work pressure was not high before and during the OJT. Thus this can not be the only explanation for non-participation. Perhaps the fact that involvement in these activities was on the trainee's own initiative explains why involvement ratings are low. These findings give reason to assume that relying to much on the trainee's own initiative, results frequently in non-participation.

Backgrounds of non-participation. To gain more insight in the backgrounds of non-participation a comparison was made between participants and non-participants. For this purpose use was made of the Mann-Whitney U test. As a consequence of the small number of respondents, $p<.10$ was found acceptable.

Participants in the self-study assignments differed from non-participants in their educational level and their behavior with regard to handling customers' complaints. Participants had a lower educational level (counted in years) (Mann-Whitney U test: U=16.5, n_1=6 n_2=11, p=.09, two-tailed). Further, participants had lower scores for their assessment of handling customers' complaints that non-participants (Mann-Whitney U Test: U = 12.5, n_1=6 n_2=11, p=.04, two-tailed).

Table 10: *Trainees in treatment group that were involved in the additional training activities*

Part of the treatment	Number of trainees in treatment group	Number of trainees that actually carried out the training activity	Percentage of trainees that carried out the training activity
self-study assignments	17	6	35%
mutual observations	16	3	19%
filling in the log	17	2	12%
discussion with manager	16	5	31%

Participants in the mutual observations differed from non-participants with regard to management support, length of the OJT and workload during training. Participants assessed management support as higher (Mann-Whitney U Test: U = 5.5, n_1=3 n_2=13, p=.06, two-tailed), their duration of the OJT was considerable shorter (Mann-Whitney U Test: U = 6.0, n_1=3 n_2=14, p .07, two-tailed), and they assessed the workload during OJT as lower (Mann-Whitney U Test: U = 6.0, n_1=3 n_2=15, p .06, two-tailed).

Trainees that held a meeting with their manager about the training during the time that the OJT was carried out in their call-center differed from the other trainees with regard to work experience (in months) (Mann-Whitney U Test: U = 9.5, n_1=4 n_2=11, p .10, two-tailed), perception of potential sales conversations with customers (Mann-Whitney U Test: U = 12.0, n_1=5 n_2=11, p .09, two-tailed). They were less months employed in the call-center as the non-participants. They also assessed more calls as potential sales conversations. Apparently, if managers scheduled meetings with their subordinates, they choose to do this with the new, promising employees.

Effects. The next step involved the analysis of progress in behavior and perception as a result of the treatment. In the comparison group were included the trainees from the original comparison group and the trainees of the treatment group who were not involved in the training activities of the treatment. As a consequence of the small number of respondents, $p<.10$ was found acceptable. To measure the progress during OJT, the mean differences of the scales at O1 and O2 were computed (O2 minus O1). For two of the four training activities significant differences in progress were found. The self-study assignments resulted in a considerable progress in handling customers' complaints.

The mutual observations had a positive impact on the progress in sales behavior and handling customers' complaints. Negative effects of the mutual observations were observed for general conversation and for the trainee's perception of the percentage of calls that has sales potential (see Table 12). For the log and the discussion with the manager, no differences between the two groups were observed.

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Table 11: *Effects of the self-study assignments*

Variable	Mean treatment group	Mean comparison group	Mann-Whitney U test (one-tailed)
progress in handling customers' complaints (O2 - O1)	.67 (n=6)	.12 (n=16)	U=18, p.01

Table 12: *Effects of the mutual observations*

Variable	Mean treatment group	Mean comparison group	Mann-Whitney U test (one-tailed)
progress in sales behavior (O2 - O1)	.62 (n=3)	.25 (n=18)	U=12.5, p.08
progress in skills handling customers' complaints (O2 - O1)	1.00 (n=3)	.16 (n=19)	U=3, p.00
progress in general conversation behavior (O2 - O1)	-.79 (n=3)	-.28 (n=18)	U=11, p.06
progress in perception of potential sales calls (O2 - O1)	- 25.0 (n=3)	8.23 (n=17)	U=11, p.07

Long-term effects. The next step concerned the investigation of the long-term transfer of the treatment. For this reason the mean difference scores were calculated by the same procedure as the one that was used for the regression analysis of the long-term transfer (mean difference O3 minus O2). One significant difference was found. Trainees who carried out self-study assignments differed from non-participants with regard to handling customers's complaints (Mann-Whitney U Test: U = 18, n_1=5 n_2=12, p .05, one-tailed). The treatment group had a negative transfer (mean treatment group = -.40), while this behavior remained almost stable in the comparison group (mean comparison group = -.02).

9. Conclusion and discussion

In this study the focus was on the effectiveness of OJT for employees of call-centers. The training objective was to improve trainees' sales communication with customers. In the project the focus was on three research questions.

The first research question focused on the effectiveness of the OJT. The training resulted in a modest but significant progress in trainees' behavior. Trainees' progress in perception of the calls with potential for selling products and services was not significant. There are two possible explanations for the modest progress in behavior. The first explanation is that for trainees who have already substantial experience with their daily tasks have achieved a rather high level of performance. Any

new training event does not improve their performance significantly, because of the "ceiling effect". This occurs especially when the training can be characterised as a refreshment training of a rather limited length. If achievement of higher levels of performance is the objective this will be difficult to realize. A second explanation might be that trainees overestimated their behavior at the start of the OJT, resulting in high scores on the behavioral scales. Through the training they become aware of the weak spots in their behavior, as a result of trainer's feedback, and as a consequence they do not perceive substantial progress in their behavior. The above mentioned two explanations do not compete with each other, both might be valid. Nevertheless, a significant but modest improvement in behavior was observed. Approximately 15 weeks later this improvement was still existing. Thus the OJT resulted in a long-term transfer.

The second research question focused on the variables that explained the effectiveness of the OJT. For all four mean scores (O2 minus O1) of the dependent variables, a substantial amount of variance was explained by the variables included in this study (percentage of explained variance varied between .32 and .81). With regard to trainee characteristics, age, behavior and perception of the training before the OJT predicted trainee's progress. Two organizational characteristics were found as predictors for progress: managerial support and workload during training. Both affected positively the trainee's progress. Finally, the length of the OJT was a strong predictor for progress in behavior. For two of the three behavioral scores the length of the OJT explained almost one-third in the variance of behavioral scores. These findings stress the contemporary notion that training effectiveness is the consequence of the interplay between characteristics of the trainee, the organizational context and the training design. This seems especially the case for OJT because the organizational context serves also as the learning situation.
The long-term transfer of the OJT was only predicted by the behavioral scores at the end of the training. This is in line with the work of Den Ouden (1992). She concluded that previous behavior is a prominent predictor for future behavior and that training does contribute only to a certain extend to long-term transfer of behavior.

The last research question focused on the possibilities to enhance behavioral improvement through the modification of the training design. In this study in four of the seven call-centers a different training design was used and they served as the treatment group. An overview of the content of the treatment is presented in section 5 of this paper.
Remarkable is the number of trainees that did not participate in the additional activities of the treatment. The findings question the contemporary idea of employees as self-directed learners. Probably trainees need more guidance and feedback to become involved in additional training activities. Most striking were the results of the mutual observations. These observations increased the progress in handing customers' complaints and effected positively the progress in sales behavior. On the other hand the observations resulted in a decrease of general conversation behavior and in a

lower percentage of perceived possibilities for sales in customer's calls. The overall conclusion regarding the effect of the treatment is that the treatment caused mixed results, and further in-depth studies are required.

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Appendix 1 Overview of the variables included in the study

Trainees questionnaire O1 (n=49)

Variable	Number of items	Reliability	N	Mean	Standard Deviation
self-efficacy[1]	6	α .86	49	3.18	.27
job involvement[1]	6	α .63	49	3.52	.37
perception OJT[1]	8	α .85	49	3.14	.25
feedback of manager[1]	6	α .79	49	3.47	.44
support of manager[1]	7	α .91	49	4.04	.63
feedback of colleagues[1]	5	α .83	48	3.21	.73
support of colleagues[1]	5	α .82	48	3.49	.43
workload[1]	5	α .64	49	2.21	.41
sales behavior[2]	25	α .93	42	5.13	.75
handling complaints[2]	5	α .85	47	5.78	.74
general conversation[2]	8	α .85	48	5.66	.72
% potential sales calls	1		48	24.40	16.13
sex	1		45	male 19 female 36	
age	1		48	35.25	8.18
experience (in months)	1		45	38.96	44.08
hours on telephone per week	1		49	27.00	9.66
education (in years)	1		49	5.61	2.08
job related training in the last five years	1		49	11.18	11.95

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Trainee's questionnaire O2 (n=39)

Variable	Number of items	Reliability	N	Mean	Standard Deviation
self-efficacy[1]	6	α .73	37	3.13	.36
job involvement[1]	6	α .64	36	3.40	.40
perception OJT[1]	8	α .82	35	3.64	.38
workload during OJT[1]	5	α .80	37	2.41	.52
Quality of training deliverance[1]	9	α .70	35	3.94	.36
Opportunity to perform[1]	4	α .90	36	3.38	.46
sales behavior[2]	25	α .95	35	5.30	.69
handling complaints[2]	5	α .93	36	5.94	.82
general conversation[2]	8	α .89	36	5.77	.67
% potential sales calls	1		33	26.21	18.16
length of OJT (in minutes)	1		37	285	210.5

Trainee's questionnaire O3 (n=26)

Variable	Number of items	Reliability	N	Mean	Standard Deviation
self-efficacy[1]	6	α .67	26	3.09	.34
job involvement[1]	5	α .63	26	3.64	.52
sales conversation[2]	25	α .90	26	5.43	.50
handling complaints[2]	5	α .92	26	5.91	.72
general conversation[2]	8	α .92	26	5.87	.73

[1] items were phrased, whenever possible, in statements. The agreement was rated on a 5-point Likert-type scale (1=totally disagree to 5=totally agree).

[2] items were phrased from 1= very poor performance to 7= very good performance.